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(71) Applicant (for all designated States except US): IC INNOVATIONS LTD [GB/GB]; 47 Prince's Gate, Exhibition Road, London SW7 2QA (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GIBSON, Vernon, Charles [GB/GB]; Flat 2, 46 Prince's Gate, Exhibition Road, London SW7 2QA (GB). O'REILLY, Rachel, Kerry [GB/GB]; "Brambles", 33 Ballgrainey Road, Craigavad, County Down BT18 0HE (GB).

(74) Agents: CLYDE-WATSON, Zoe et al.; D Young & Co, 21 New Fetter Lane, London EC4A 1DA (GB).

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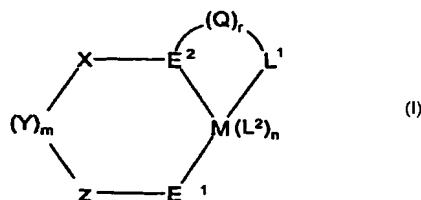
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(54) Title: TRANSITION METAL COMPLEXES, ESPECIALLY IRON COMPLEXES, USED AS A CATALYST COMPONENT IN THE POLYMERISATION OF OLEFINS



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(57) Abstract: The present invention relates to compounds of formula (I) wherein each of X, Y, Z is independently selected from 0, S, NR<sup>1</sup>, CR<sup>2</sup>R<sup>3</sup>, N and CR<sup>4</sup>, and where optionally X-Y, Y-Z, Z-E<sup>1</sup> and X-E<sup>2</sup> each independently form part of a saturated or unsaturated ring system which may be substituted or unsubstituted; m is 0 or 1; M is a metal selected from Ti[III], Ti[IV], Fe[II], Fe[III], Co[II], Co[III], Ni[II], Cr[III], Mn[II], Mn[III], Mn[IV], Ru[II], Ru[III], Ru[IV], Pd[II], V[II], V[III], V[IV], V[V], Cu[II], Cu[III], Rh[II], Rh[III], Mo[II], Mo[III], Mo[V], Re[II] and Re[III]; each of E<sup>1</sup> and E<sup>2</sup> is independently selected from O, S, NR<sup>5</sup>, N, P, PR<sup>6</sup>, where at least one of either E<sup>1</sup> or E<sup>2</sup> carries a formal negative charge; L<sup>2</sup> is one electron donor ligand; n is zero or an integer such that the compound has an overall charge of zero or +1; L<sup>1</sup> is NR<sup>7</sup>R<sup>8</sup>, PR<sup>9</sup>R<sup>10</sup>, OR<sup>11</sup>, SR<sup>12</sup>, O, S or NR<sup>13</sup>, imidazolyl, pyridinyl, benzimidazolyl or quinolinyl; each of R<sup>1-8</sup> and R<sup>16</sup> is independently H or a hydrocarbyl group; Q is a linker group; and r is 0 or 1. Further aspects of the invention relate to catalyst compositions comprising compounds of formula (I), and their use in the polymerisation of olefinically unsaturated monomers.